

What is claimed is:

1. A method for identifying a potentially transcribed region of a genome comprising:

a) Hybridizing a plurality of nucleic acid probes with a nucleic acid sample,

5 wherein said nucleic acid sample comprises transcripts from said genome,

wherein said probes are targeting an area of said genome; and

b) Identifying said transcribed region as a region of said genome where

hybridization of all consecutive probes targeting said region are above a

threshold value.

10 2. The method of Claim 1 wherein said probes are oligonucleotides.

3. The method of Claim 2 wherein said oligonucleotides are immobilized on a substrate.

4. The method of Claim 1 wherein said threshold value is non-specific binding.

5. The method of Claim 4 wherein said non-specific binding is measured using a probe designed to contain at least one mismatched base.

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6. The method of Claim 1 further comprising identifying a sub-region wherein hybridization of said probes targeting said sub-regions is similar and indicating said sub-region as said transcribed region.

7. The method of Claim 6 wherein said genome is from a prokaryote.

20 8. The method of Claim 7 wherein said transcribed region is an operon.

9. The method of Claim 8 wherein said prokaryote is E. Coli.

10. A computer software product comprising:

a) a computer program code that receives a plurality of hybridization intensities, wherein each of said intensities reflects the hybridization of one of a plurality of probes to a nucleic acid sample and wherein said probes are targeting a genome;

5 b) a computer program code that identifies a region of said genome wherein intensities for said probes against said region are above a threshold value; and

c) a computer readable media for storing said codes.

11. The computer software product of Claim 10 further comprising a computer program code that identifies an area of said region wherein intensities for said 10 probes against said area are similar.

12. The computer software product of Claim 11 wherein the difference in said intensities for said probes against said area is within 2 fold.

13. The computer software product of Claim 12 wherein said difference is within 150%.

15 14. The computer software product of Claim 11 further comprising a computer program code to indicate said area as a transcribed area.